

1 - 4" MULTICELL CONDUIT (WITH 4 - 1" INNER DUCTS) DETAIL

Not To Scale

DETAIL NOTES

- 1. Multicell Conduit:
- A. A 1/4" nylon rope shall be installed in each inner duct (used or unused), for future cable installation. Inner ducts color scheme shall be: blue, gray, white, and orange. To ensure correct conduit is used between structures.
- B. A number 10 gauge, stranded copper, polyester or cross linked polyethylene (XLPE) insulated tracing wire shall be installed in the gray inner duct. The tracing wire shall be continuously run between pull boxes (absolutely no splices except in a pull box). The wire shall be tagged as "TRACING WIRE", coiled (3 feet in length) and left disconnected at each end (open circuit).
- C. In changes of alignment, the largest possible radius shall be utilized to accomplish bends. In no case shall the minimum radius be less than 4 feet.
- 2. Materials:
- A. Couplings—The couplings shall be of the same material as the conduit and shall be glued sufficiently tight to prevent silt or concrete from entering the conduit.
- B. Spacers—The spacers shall be plastic base and intermediate type for PVC conduit.

- 3. Installation:
- A. The profile between structures shall be set so that the conduits are level or sloped to the next structure. where conduits enter a structure at a lower level than the approaching profile of the conduit, the conduit shall be sloped down to the structure at a rate not—to—exceed 5 percent.
- B. The trench shall be excavated so that any curve radius will be as large as possible (36' min. radius). The trench shall be excavated no wider than necessary to accommodate the conduit and concrete encasement as shown on the details. The bottom of the trench shall be undisturbed, tamped, and relatively smooth earth. trenches which have been excavated too deep at any point are to be partially refilled and tamped solid.
- C. Minimum clearance with utilities shall be coordinated with the utility owners.
- D. The conduit runs shall be as straight as possible. Schedule 40 electric rated, 5—degree angle couplings or combinations of 5—degree angle couplings with straight sections of conduit are recommended to negotiate curves. No field bends.
- E. Precast plastic base and intermediate spacers shall be placed at 5-foot intervals that shall separate the conduits a minimum of 2 inches apart and provide a 3-inch minimum outside encasement. Burrs on the ends of the conduit, as the result of sawing, must be removed prior to completing a joint. Surfaces to be joined shall be clean and free from dirt, foreign materials, and moisture. The joints shall be sealed with proper cement specified by the conduit manufacturer. The conduits shall be glued together with proper cement so as to securely hold the conduits in place. Where the conduits enter the manhole, bell ends shall be installed for smooth connection to the interior of the manhole. The open ends of the conduits shall be closed with tight fitting plugs to prevent mud or other foreign material from getting into the conduit. after the conduit is placed, it shall be inspected before the concrete is poured.
- F. A 1/2" p-line shall be installed in all conduit.

City Engineer, EMH&T Inc

City Service Director

STANDARD DIMENSIONS FOR

COMMUNICATION DUCT BANK

CITY OF GROVE CITY, OHIO

STANDARD CONSTRUCTION DRAWING

Drawing No.

February 2019 C-GC-100